

F. J. SEYMOUR.

MAKING SHEET METAL KETTLES.

No. 179,491.

Patented July 4, 1876.

Fig. 1.

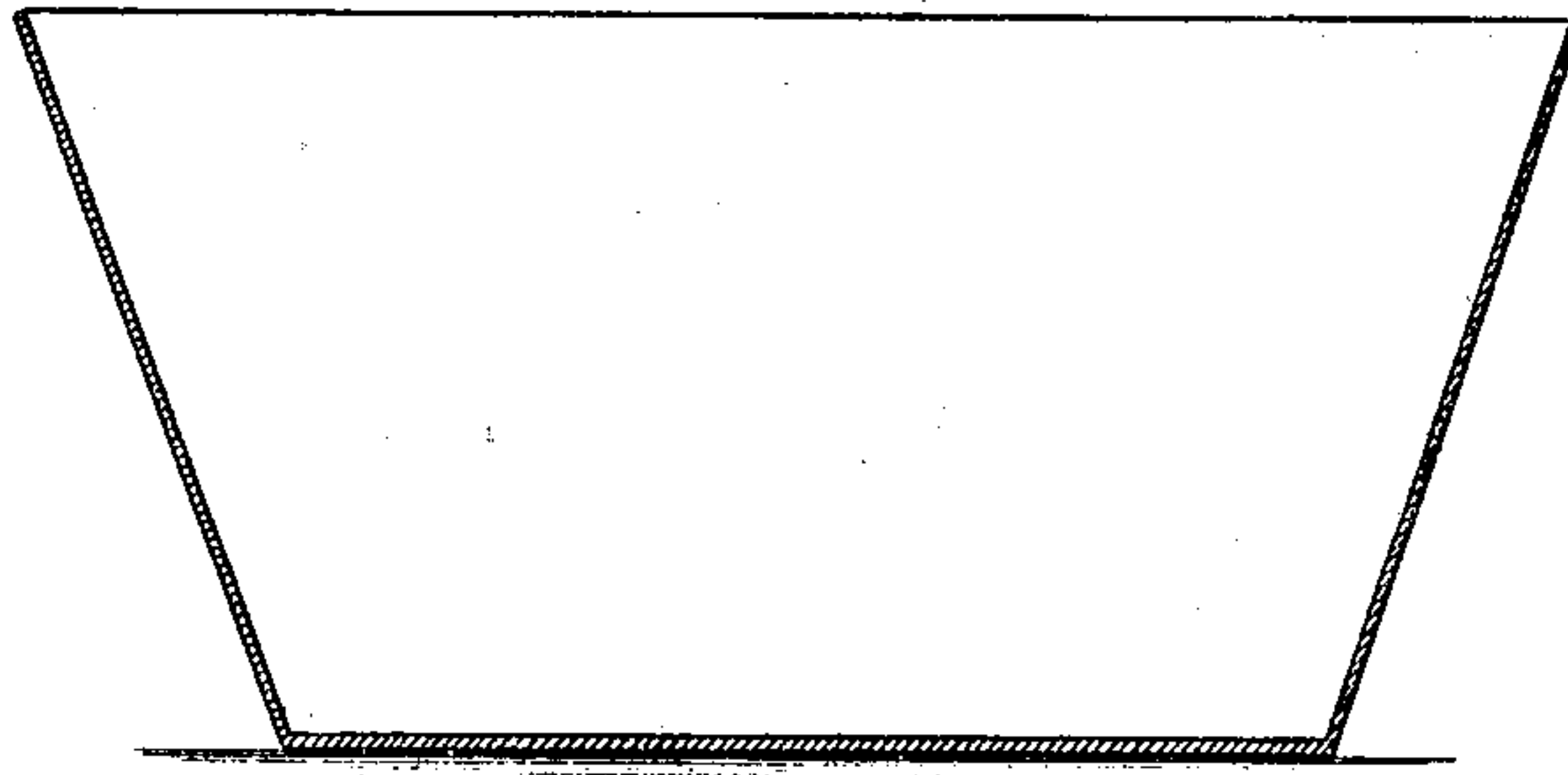
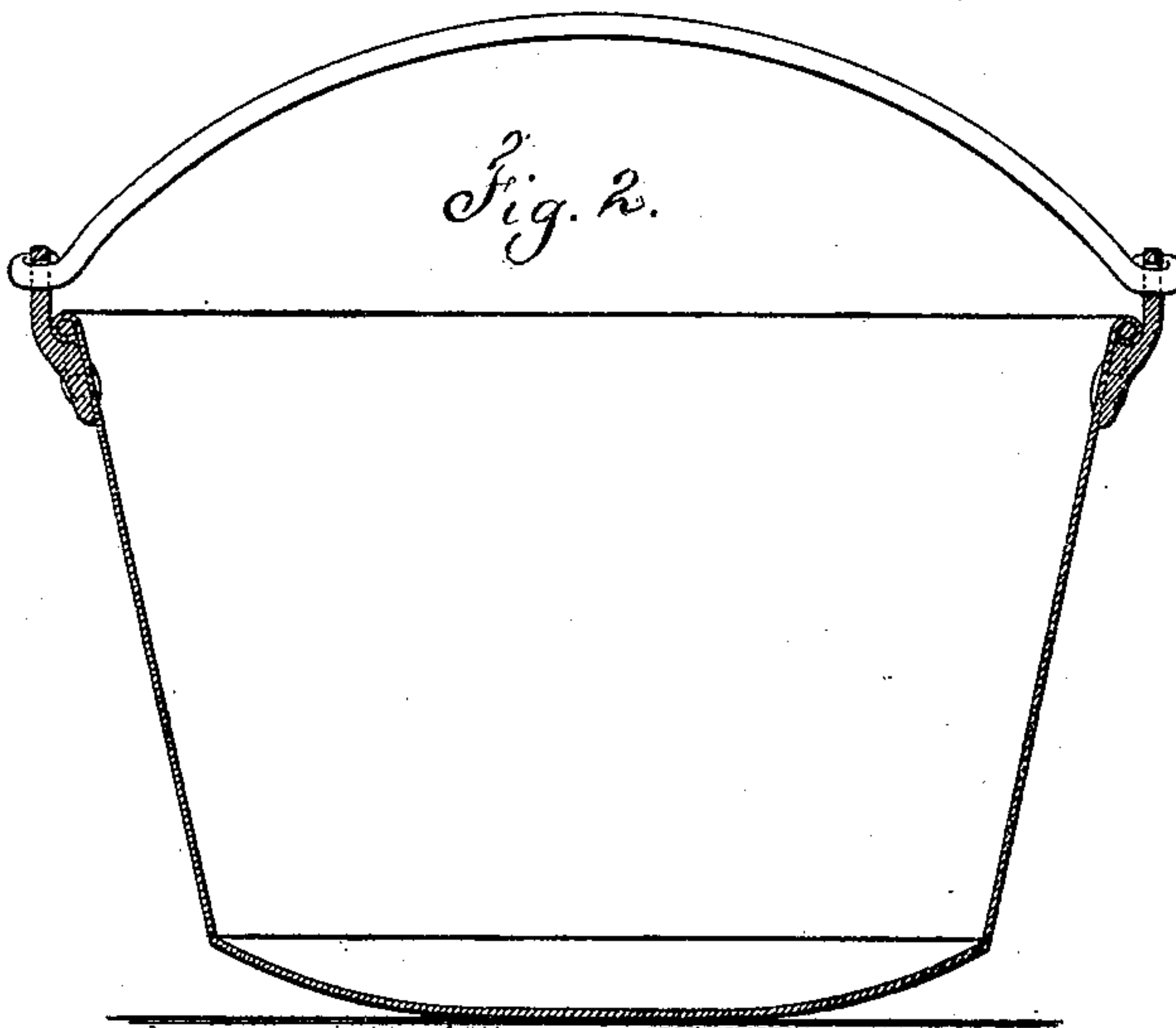


Fig. 2.



Witnesses,

Chas. H. Smith.
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per

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att'y.

UNITED STATES PATENT OFFICE.

FREDERICK J. SEYMOUR, OF WOLCOTTVILLE, CONNECTICUT.

IMPROVEMENT IN MAKING SHEET-METAL KETTLES.

Specification forming part of Letters Patent No. 179,491, dated July 4, 1876; application filed May 20, 1873.

To all whom it may concern:

Be it known that I, FREDERICK J. SEYMOUR, of Wolcottville, in the county of Litchfield and State of Connecticut, have invented an Improvement in the Manufacture of Sheet-Metal Kettles, of which the following is a specification:

In all the kettles heretofore made the bottom of the kettle is of soft metal, having been annealed once or more after being shaped; hence the bottom of the kettle is in the form of annealed metal, and is soft and liable to be bent and bruised by use. This arises from the fact that the bottom of the kettle has heretofore been first shaped and then the sides drawn up from a flat plate by two or more spinning or shaping operations, and between each operation the metal had to be annealed. It is very important that the bottom of the kettle shall be as strong and rigid as possible, because it is exposed to the largest amount of wear.

My invention consists in a mode of making kettles, whereby the bottom is of hard-rolled sheet metal, possessed of elasticity and rigidity, the opposite of sheet metal that has been annealed, and remains in that condition.

In order to illustrate the manner in which this article is made, I have shown by the sec-

tion, Fig. 1, a brass-kettle blank with a flat bottom and conical sides. When the blank has reached this stage of manufacture (by any known spinning or shaping operation, such as spinning upon a form or mold,) the blank is annealed and placed upon a form and subjected to the action of a roller or spinning-tool, which commences at or near the center and stretches, consolidates, and hardens the metal, giving to the bottom the convex form shown in the section of the complete kettle, Fig. 2. In this manner the metal of the bottom becomes of the same character as that of the sides, possessing elasticity, springiness, solidity, and hardness.

I claim as my invention—

The method herein described of manufacturing brass kettles, consisting in shaping the sides and reducing the thickness of the metal toward the top, and then finishing the bottom by the final spinning operation that renders the same convex and hardens the metal, as set forth.

Signed by me this 10th day of May, A. D. 1873.

FREDERICK J. SEYMOUR.

Witnesses:

CHAS. F. BROOKER,
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